

**What is claimed is:**

1. A method of preparing a catalyst for polymerization of aliphatic polycarbonates, comprising:
  - reacting a zinc precursor with organic dicarboxylic acid in a solution, the  
5 solution including a templating agent.
2. The method of claim 1, wherein the templating agent is a non-ionic surfactant.
3. The method of claim 1, wherein the templating agent is an amphiphilic block copolymer.  
10 4. The method of claim 3, wherein the amphiphilic block copolymer is a diblock copolymer of which blocks are different each other.
5. The method of claim 3, wherein the amphiphilic block copolymer is an A-B-A type triblock copolymer or a B-A-B type triblock copolymer.
6. The method of claim 1, wherein the templating agent is selected  
15 from the group consisting of polyoxyethylene-polyoxypropylene-polyoxyethylene, polyoxyethylene-polyoxypropylene, polyoxypropylene-polyoxyethylene-polyoxypropylene, polystyrene-polyoxyethylene, polystyrene-poly-2-vinylpyridine, polystyrene-poly-4-vinylpyridine, polyethylene-propylene-polyoxyethylene, polyethylene-propylene-polyoxyethylene,  
20 polymethylmethacrylate-polyoxyethylene, polystyrene-polymethylmethacrylate, polystyrene-polybutadiene, polystyrene-polybutadiene-polystyrene, polystyrene-polyisoprene, polystyrene-polyisoprene-polystyrene, polyN-vinylpyrrolidone-polystyrene, poly(dimethylamino)ethylmethacrylate-methacrylate,  
25 poly(2-dimethylamino)ethylmethacrylate-polybutylmethacrylate, polystyrene-poly-2-hydroxyethylmethacrylate, polyisobutylene-polymethylvinylether, polystyrene-polyhydroxyethylvinylether, polystyrene-polyionicacetylene, polymethyl-3-(methyleneglycol)vinylether-polyisobutylvinylether, poly(2-(1-pyrrolidonyl)ethylvinylether-polyisobutylvinylether, and  
30 polylauryllactam-polytetrahydrofuran.
7. The method of claim 6, wherein the templating agent is selected

from the group consisting of polyoxyethylene-polyoxypropylene-polyoxyethylene, polyoxyethylene-polyoxypropylene, polyoxypropylene-polyoxyethylene-polyoxypropylene, polystyrene-polyoxyethylene, polystyrene-poly-2-vinylpyridine, polystyrene-poly-4-vinylpyridine, 5 polyethylene-polyoxyethylene, polyethylenepropylene-polyoxyethylene, polymethylmethacrylate-polyoxyethylene, polystyrene-polymethylmethacrylate, polystyrene-polybutadiene, polystyrene-polybutadiene-polystyrene, polystyrene-polysisoprene, and polystyrene-polysisoprene-polystyrene.

8. The method of claim 1, wherein the amount of the templating agent 10 is 1 to 20 parts by weight based on 100 parts by weight of the solvent.

9. The method of claim 1, wherein the zinc precursor is selected from the group consisting of anhydrous zinc acetate, zinc hydroxide, zinc chloride, zinc nitrite, zinc perchlorate hexahydrate, zinc oxide, zinc sulfate, zinc acetate dihydrate, and zinc nitrate hexahydrate.

15 10. The method of claim 1, wherein the organic dicarboxylic acid is aliphatic dicarboxylic acids or aromatic dicarboxylic acids.

11. A method of polymerizing an aliphatic polycarbonate, comprising: copolymerizing alkylene oxide and carbon dioxide in the presence of a catalyst, the catalyst being prepared by reacting a zinc precursor with organic 20 dicarboxylic acid in a templating agent-included solution.